## **CONTENTS**

Complex formation between polyols and rare earth cations. The crystal structure of galactitol · 2PrCl <sub>3</sub> · 14 H <sub>2</sub> O	
S.J. Angyal and D.C. Craig (Kensington, N.S.W., Australia)	1
Ethylendiamin–Kupfer(II)-Komplexe mit Polyolat-Ionen aus <i>rac-trans</i> -Cyclohexan-1,2-diol, Erythritol und Methyl- $\alpha$ -D-mannopyranosid. Herstellung und Kristallstrukturen von {(Ethylendiamin)Cu(C <sub>6</sub> H <sub>10</sub> O <sub>2</sub> )} · H <sub>2</sub> O, [( $\mu$ -Ethylendiamin){Cu <sub>2</sub> (Ethylendiamin) <sub>2</sub> ( $\mu$ ' <i>meso-trans</i> -trans-tr	
Butantetraolat(4 – ))]] · 8H <sub>2</sub> O und [(Ethylendiamin)Cu( $\alpha$ -D-Man $p$ OMeH $_2^{[2,3]2-)$ ] · 2H <sub>2</sub> O N. Habermann, M. Klaassen und P. Klüfers (Karlsruhe, Deutschland)	9
Carbohydrate interaction with monovalent ions. The effects of Li <sup>+</sup> , Na <sup>+</sup> , K <sup>+</sup> , NH <sub>4</sub> <sup>+</sup> , Rb <sup>+</sup> , and Cs <sup>+</sup> on the solid state and solution structures of D-glucono-1,5-lactone and D-gluconic acid	
HA. Tajmir-Riahi and J.T. Agbebavi (Quebec, Canada)	25
Inclusion complexes of cyclomaltoheptaose ( $\beta$ -cyclodextrin) and its methylated derivatives with the main components of the pheromone of the olive fruit fly	
A. Botsi, K. Yannakopoulou and E. Hadjoudis (Athens, Greece)	37
Second-derivative FTIR spectra of native celluloses from Valonia and tunicin A.J. Michell (Clayton, Australia)	47
Crystal structure of 2,5-anhydro-1-O-(p-tolylsulfonyl)-p-mannitol R.J. Voll, T.M. Nguyen, F.R. Fronczek and E.S. Younathan (Baton Rouge, LA, USA)	55
The crystal and molecular structure of $\beta$ -D-fructofuranosyl $\alpha$ -D-xylopyranoside hemihydrate T. Taga, E. Inagaki, Y. Fujimori, K. Fujita and K. Hara (Kyoto, Yokohama, Japan)	63
4-Homopyrazofurin and an acyclic analogue	
D.R. Sauer, S.W. Schneller (Tampa, FL, USA) and B. Gabrielsen (Frederick, MD, USA)	71
Synthesis of glucuronides of $\alpha,\beta$ -unsaturated carboxylic acids M. Tanaka, M. Okita and I. Yamatsu (Ibaraki, Japan)	81
M. Tanaka, M. Okita and I. Tamatsu (toaraki, Japan)	01
Synthesis and X-ray crystallographic structure determination of methyl $\alpha$ -D-galactopyranoside 2,6-bis(sodium sulfate) $\cdot$ 2H <sub>2</sub> O	
D. Lamba (Rome, Italy), W. Mackie, A. Rashid, B. Sheldrick and E.A. Yates (Leeds, United Kingdom)	89
A new approach to the chemical synthesis of the trisaccharide, and the terminal di- and mono-saccharide units of the major, serologically active glycoplipid from Mycobacterium leprae	
A. Borbás and A. Lipták (Debrecen, Hungary)	99
Synthesis of mirror coryno cord factors	
H.H. Baer, Y. Shen and X. Wu (Ottawa, ON, Canada)	117

Synthesis and conformational analysis of muramic acid δ-lactam structures and their 4-O-(2-acetamido-2-deoxy-β-D-glucopyranosyl) derivatives, characteristic of bacterial spore peptidoglycan	
D. Keglević, B. Kojić-Prodić, Z. Banić, S. Tomić and V. Puntarec (Zagreb, Croatia)	131
Iodonium ion-assisted synthesis of a haptenic tetrasaccharide fragment corresponding to the inner cell-wall glycopeptidolipid of <i>Mycobacterium avium</i> serotype 4 H.M. Zuurmond, G.H. Veeneman, G.A. Van der Marel and J.H. Van Boom (Leiden, Netherlands)	153
A convenient synthesis of lacto-N-biose I [β-D-Gal p-(1 → 3)-β-D-Glc p NAc] linked oligosaccharides from phenyl O-(tetra-O-acetyl-β-D-galactopyranosyl)-(1 → 3)-4,6-di-O-acetyl-2-	
deoxy-2-phthalimido-1-thio-β-D-glucopyranoside  R.K. Jain, R.D. Locke and K.L. Matta (Buffalo, NY, USA)	165
Structure of the O-specific polysaccharide of Salmonella arizonae O45	
A.S. Shashkov, E.V. Vinogradov, Y.A. Knirel, N.E. Nifant'ev, N.K. Kochetkov (Moscow, Russian Federation), J. Dabrowski (Heidelberg, Germany), E.V. Kholodkova and E.S. Stanislavsky (Moscow, Russian Federation)	177
An investigation of the structure of periodate-oxidised dextran	
S.N. Drobchenko, L.S. Isaeva-Ivanova, A.R. Kleiner, A.V. Lomakin (Gatchina SPb District, Russian Federation), A.R. Kolker and V.A. Noskin (St. Petersburg, Russian Federation)	189
Structure of the O-specific polysaccharide of the lipopolysaccharide from Yersinia kristensenii O:25.35	
R.P. Gorshkova, V.V. Isakov, E.L. Nazarenko, Y.S. Ovodov (Vladivostok, Russian Federation), S.V. Guryanova and B.A. Dmitriev (Moscow, Russian Federation)	201
A novel regioselective desulfation of polysaccharide sulfates: Specific 6- $O$ -desulfation with $N,O$ -bis(trimethylsilyl)acetamide	
M. Matsuo, R. Takano, K. Kamei-Hayashi and S. Hara (Kyoto, Japan)	209
The gum exudate of Encephalartos friderici-guilielmi D.C. Vogt and A.M. Stephen (Rondebosch, South Africa)	217
Isolation and partial characterisation of the non-cellulosic polysaccharides of flax fibre G.J. McDougall (Dundee, United Kingdom)	227
End-labelled fluorescent polyguluronate and polymannuronate for the assay of alginate lyases F.S. Wusteman and P. Gacesa (Cardiff, United Kingdom)	237
Notes	
Complexing of cycloinulo-oligosaccharides with metal ions T. Uchiyama, M. Kawamura, T. Uragami and H. Okuno (Osaka, Japan)	245
Structure elucidation of a novel acidic tetrasaccharide and hexasaccharide derived from a chemically modified heparin	240
U.R. Desai, Hm. Wang, T.R. Kelly and R.J. Linhardt (Iowa City, IA, USA)	249
The X-ray crystallographic structures of methyl 2-O-methyl-α-D-glucopyranoside and methyl 4,6-O-(S)-benzylidene-2-O-methyl-α-D-galactopyranoside	
P. McArdle, D. Cunningham, E. Lee and M. O'Gara (Galway, Ireland)	261

Application of gradient-selective COSY and double-quantum filtered gradient-selective COSY experiments to carbohydrates: 2-deoxy-p-arabino-hexose ("2-deoxy-p-glucose")  T.A. Carpenter, L.D. Colebrook, L.D. Hall and G.K. Pierens (Cambridge, United	
Kingdom)	267
Crystal and molecular structure of 2,3,4-tri-O-acetyl-1,5-anhydro-6,7-dideoxy-7-S-methyl-6-nitro-7-thio-1-glycero-1-gluco-heptitol	
P. Köll (Oldenbrug, Germany), S. Andreé, K. Peseke (Rostock, Germany) and J. Kopf	
(Hamburg, Germany)	273
Calorimetric study of the interactions of D-glucose, D-fructose, sucrose, and poly(vinyl alcohol) with borate ions	
V. Pollák and J. Mlýnek (Bratislava, Czechoslovakia)	279
<sup>13</sup> C NMR determination of the distribution of two ester substituents in cellulose acetate butyrate	
Y. Tezuka (Niigata, Japan)	285
A convenient synthesis of 1,2,3,4-tetra-O-acetyl-α-D-fucopyranose from D-galactose	
L.M. Lerner (Brooklyn, NY, USA)	291
An improved synthesis of 4-deoxy-4-fluoro-p-galactopyranosyl derivatives	
K. Koch and R.J. Chambers (Groton, CT, USA)	295
Synthesis of plasmalopsychosines A and B, two novel lysosphingolipids found in human brain K.K. Sadozai, J.K. Anand, E.D. Nudelman and Si. Hakomori (Seattle, WA, USA)	301
R.R. Saudzai, J.R. Anand, L.D. Pudelman and S1. Hakomori (Scattle, WA, USA)	301
Structure of the O-specific polysaccharide of Xanthomonas campestris NCPPB 45 lipopolysac- charide	
A.V. Bukharov, I.M. Skvortsov, V.V. Ignatov (Saratov, Russian Federation), A.S. Shashkov, Y.A. Knirel (Moscow, Russian Federation) and J. Dabrowski (Heidelberg,	
Germany)	309
Determination of the position of the O-acetyl group in a $\beta$ -(1 $\rightarrow$ 4)-mannan (acemannan) from Aloe barbardensis Miller	
S. Manna and B.H. McAnalley (Dallas, TX, USA)	317
Location of a second O-acetyl group in xanthan gum by the reductive-cleavage method  J.D. Stankowski, B.E. Mueller and S.G. Zeller (San Diego, CA, USA)	321
Selective deacylation on the glucosyl moiety of octa-O-acetylsucrose by enzymic hydrolysis: formation of 2,1',3',4',6'-penta-O-acetylsucrose	
GT. Ong, KY. Chang, SH. Wu and KT. Wang (Taipei, Taiwan)	327
Announcement	Cl
Author index	C3
Subject index	C5
onique nines	
Contents	CO